AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph at page 2, lines 2-6, with the following rewritten paragraph:

-- This Application is a Continuation-In-Part of United States Patent Application, Serial Number 10/011,187, filed on November 13, 2001 now U.S. Patent 6,648,473 entitled HIGH-RESOLUTION RETINA IMAGING AND EYE ABERRATION DIAGNOSTICS USING STOCHASTIC PARALLEL PERTURBATION GRADIENT DESCENT OPTIMIZATION ADAPTIVE OPTICS, whose disclosure is incorporated by reference herein --.

Please replace the paragraph at page 9, line 29 to page 10, line 5, with the following rewritten paragraph:

-- The image quality metric J can also be calculated either optically or digitally using the expression introduced in:

$$J = \int |F \{ \exp [i\gamma I(x, y)] \}|^4 \, dxdy$$

Where F is the Fourier transform operator and [[ã]] γ is a parameter that is dependent upon the dynamic range of the used image.--